UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,853	04/02/2001	Simon Jacobs	500744.02	9972

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EXAMINER
JARRETT, SCOTT L

ART UNIT	PAPER NUMBER
3623	

DATE MAILED: 11/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/824,853	JACOBS ET AL.
	Examiner	Art Unit	
	Scott L. Jarrett	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 October 2006*.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2 and 8-12* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2 and 8-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *7/7/05, 9/22/05, 2/16/06, 7/17/06.*

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

DETAILED ACTION

1.   This **Final** Office Action is in response to Applicant's amendment filed October

10, 2006. Applicant's amendment amended claims 2 and 8-12, claims 1 and 3-7 being

previously canceled. Currently Claims 2 and 8-12 are pending.

Response to Amendment

2.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action.

Response to Arguments

3.   Applicant's arguments with respect to claims 2 and 8-12 have been considered

but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5.   Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 9, Claim 9 recites the limitation "the shift" in 8. There is insufficient antecedent basis for this limitation in the claim. Examiner interpreted the claim to read "a shift" for the purposes of examination. Appropriate correction is required.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

7.   Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Powell et

al., U.S. Patent Publication No. 2001/0049619 in view of Scully et al., U.S. Patent No.

4,831,552.

        Regarding Claim 2, Powell et al. teach a system and method for assigning an

order to an opening (time period, shift, calendar, schedule, service provider schedule,

time bands, etc.) in a schedule after a customer has selected (requested, picked,

chosen, etc.) an appointment window in the schedule (service order, appointment time

window), wherein the opening and the appointment window are specified, the

method/system comprising (Abstract, Paragraphs 0001, 0004, 0014-0017, 0021-0022,

0034-0037, 0042-0045, 0055):

        - generating a list of schedulable time blocks (appointments, reservations,

delivery windows, time ranges/slots, estimate of daily schedule, etc.) for a shift (route,

itinerary, schedule, calendar, etc.) identified in the opening, the schedulable time blocks

having at least one of a free time block (number of days/weeks, service provider

schedule/availability, etc.; Abstract; Paragraphs 0016-0017, 0034, 0045, 0055; "A

service provider can quickly generate a schedule in real time with narrow time windows

at which a service technician may be on site at a customer's residence or facility.",

Paragraph 0022; ; Figure 2, Figure 4, Elements 54, 56);

      - intersecting (overlaying, mapping, matching, unioning, etc.) the opening and

the appointment window to obtain a time range defined by the overlap of the opening

and the appointment window (actual service request replacing matching/closets

estimated/forecasted service request; Paragraphs 0017, 0036-0037, 0045, 0055; Figure

4, Elements 54, 58, 60); and

8.   - choosing (selecting, picking, etc.) the opening (available resource, route,

appointment, time period/block/window) in which to assign the order if a schedulable

time block from the list of schedulable time blocks includes the opening and wherein the

opening is within the time range (Paragraphs 0016-0017, 0021-0022, 0049, 0054,

0065).

    Powell et al. does not expressly teach that the schedulable time blocks having at

least one free time block (open, available) *and a virtual free time block* (potentially

open/free, contiguous appointment, block that could be used by bumping one or more

contiguous orders within a shift; Specification: Paragraph 1, Page 6) as claimed.

    Scully et al. teach generating a list of schedulable time blocks having at least one

free time block (open, available) and a virtual free time block (free time slots, periods,

already scheduled meetings of lower priority, etc.; Column 3, Lines 5-15, 20-30, 45-50;

Column 23, Lines 18-60; Column 24, Lines 8-28) and defining a range of time having

openings to which an appointment can be made (Column 23, Lines 18-60; Column 24,

Lines 8-28; Figures 3a-4b) in an analogous art of electronic calendaring for the

purposes of enabling users to more readily find a schedulable time block that meets the

required time constraints (Column 3, Lines 20-30) as well as enabling users to pre-empt

and/or shift/move already scheduled appointments (virtual time blocks) that have a

lower priority than the overlapping/conflicting appointment (Column 23, Lines 45-59).

It would have been obvious to one skilled in the art at the time of the invention

that the system and method for assigning an order to an opening in a schedule (i.e.

scheduling an appointment) as taught by Powell et al. would have benefited from

generating a list of both free and virtual time blocks when assigning an order to a

schedule in view of the teachings of Scully et al.; the resultant system/method enabling

businesses to more readily find a schedulable time block that meets the customer's

selected appointment window wherein the businesses can pre-empt, shift, move and/or

modify existing orders (virtual time blocks), having a lower value and/or priority, in order

to meet the customer's appointment (Scully et al.: Column 3, Lines 20-30, 45-59).

9.   Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over

WebVan as evidenced by at least the following:

        I. Clyde, Witt, UPDATE: Material Handling in the Food Industry (October 1999),

herein after WV1;

        II. Borders et al., WO 00/68859 (November 2000), herein after WV2; and

        III. Borders et al., WO 00 (November 2000), herein after WV3.

        in view of Scully et al., U.S. Patent No. 4,831,552.

        Regarding Claim 8 WebVan teaches a system and method for assigning an order

to a schedule after a customer has specified an appointment window in the schedule,

the method/system comprising (reference WV1: Paragraphs 2-4, Page 4; Paragraphs

1-3, Page 7; reference WV2: transportation subsystem, route planner, delivery window

estimator component, dispatch subsystem; Pages 18-19, 45-47; Figure 1, Elements

118, 124, 132, 160; Figure 5; Figure 7A, Elements 10-22; reference WV3, Pages 3, 18,

33-35, 38-40):

        - checking a list of openings for overlap with the appointment window (zone

window creator, delivery window estimator component, delivery window reservation,

delivery scheduling, scheduled delivery hours; reference WV2: "One function of the

Transportation Subsystem is to generate a list of available delivery windows (for

presentation to the customer) based upon transportation capacity data such as, for

example, the number of couriers available, the number of delivery vehicles available,

the number of orders for a particular day, truck routes, etc.", Lines 20-33, Page 18;

Lines 1-18, Page 19; Lines 31-32, Page 44; Lines 31-33, Page 45; Lines 1-11, Page 46;

Figure 7A, Elements 10-22; reference WV3: Page 3, Lines 13-21, Page 21; Lines 19-

23, Page 24; Lines 18-22, Page 33; Pages 34-35);

     - generating a list of schedulable time blocks if there is no overlap, each of the

schedulable time blocks having at least one of a free time block and defining a range of

time having openings in which the order can be scheduled (e.g. adding new routes,

providing customer with alternative delivery times/windows if one or more items are not

deliverable in the selected time window, window templates, etc.; reference WV2: Lines

31-32, Page 44; Lines 1-2, Page 45; reference WV3: Lines 1-9, Page 7; Lines 11-16,

Page 32); and

     - assigning the order to the schedule if there is an opening in the list of openings

that overlaps the appointment window *or* an opening in the list of schedulable time

blocks that overlaps with the appointment window (allocating orders to specific routes,

trucks, zones, delivery schedules/windows, stops, etc.; route planner, dispatch

subsystem, reserving subsystem capacities; reference WV2: Lines 20-32, Page 18;

Lines 21-30, Page 19; Lines 1-8, Page 20; Lines 8-31, Page 38; Lines 1-19, Page 39).

     WebVan does not expressly teach that the schedulable time blocks having at

least one free time block (open, available) *and a virtual free time block* (potentially

open/free, contiguous appointment, block that could be used by bumping one or more

contiguous orders within a shift; Specification: Paragraph 1, Page 6) as claimed.

Scully et al. teach generating a list of schedulable time blocks having at least one

free time block (open, available) and a virtual free time block (free time slots, periods,

already scheduled meetings of lower priority, etc.; Column 3, Lines 5-15, 20-30, 45-50;

Column 23, Lines 18-60; Column 24, Lines 8-28) and defining a range of time having

openings to which an appointment can be made (Column 23, Lines 18-60; Column 24,

Lines 8-28; Figures 3a-4b) in an analogous art of electronic calendaring for the

purposes of enabling users to more readily find a schedulable time block that meets the

required time constraints (Column 3, Lines 20-30) as well as enabling users to pre-empt

and/or shift/move already scheduled appointment (virtual time blocks) that have a lower

priority than the overlapping/conflicting appointment (Column 23, Lines 45-59).

It would have been obvious to one skilled in the art at the time of the invention

that the system and method for assigning an order to an opening in a schedule (i.e.

scheduling an appointment) as taught by WebVan would have benefited from

generating a list of both free and virtual time blocks when assigning an order to a

schedule in view of the teachings of Scully et al.; the resultant system/method enabling

businesses to more readily find a schedulable time block that meets the customer's

selected appointment window wherein the businesses can pre-empt, shift, move and/or

modify existing orders (virtual time blocks), having a lower value and/or priority, in order

to meet the customer's appointment (Scully et al.: Column 3, Lines 20-30, 45-59).

Regarding Claim 9 WebVan teaches a system and method for assigning orders to a schedule further comprising updating a tour time of the shift (schedule, itinerary, route, calendar, etc.), wherein updating includes incrementing the time required to travel to the order and from the order to a next order, wherein updating includes incrementing a booked time for the shift by an amount of time needed for traveling to the order and an amount of time needed to work on the order and wherein updating includes adjusting a load level of the shift to account for the order (reference WV3: "Route Planning", Lines 20-25, Page 37; Pages 38-40; "Van Stop Process", Pages 64-65; "Tote to Door Process", Pages 65-66).

Regarding Claim 10 WebVan teaches a system and method for assigning orders to a schedule further comprising aggregating at least two orders according to an aggregation criteria (route planning/planer, capacity planning/reservation; reference WV2: Lines 17-25, Page 18; reference WV3: Pages 38-40).

10.   Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over

WebVan as evidenced by at least the following:

        I. Clyde, Witt, UPDATE: Material Handling in the Food Industry (October 1999),

herein after WV1;

        II. Borders et al., WO 00/68859 (November 2000), herein after WV2; and

        III. Borders et al., WO 00 (November 2000), herein after WV3.

        in view of Scully et al., U.S. Patent No. 4,831,552 as applied to claims 8-10

above and further in view of Nanry et al., Solving the pickup and delivery problem with

time windows using reactive tabu search (2000).

        Regarding Claim 11 WebVan teaches teach a system and method for assigning

orders to a schedule further comprising further comprising an optimization component

for optimizing the delivery scheduling/dispatching of orders (reference WV2: Lines 17-

22).

        WebVan is silent on the optimization technique/approach utilized by the

Scheduling and Optimization component and subsequently does not expressly teach

defragmenting a set of free time blocks in the shift as claimed.

        Nanry et al. teaches well known techniques for defragmenting (reorganizing, re-

planning, optimizing, shuffling, swapping, etc.) a set of time blocks (time periods, route

stops, delivery windows, appointments, schedules, vans, trucks, etc.) in the shift

(schedule, route, etc.; Section 3.2 Move Neighborhoods, Pages 112-113; Figures 1-3)

in an analogous art of assigning orders to time windows for the purposes of developing

an initial feasible delivery schedule solution for multiple routes (Section 3.1, Pages 111-

112).

It would have been obvious to one skilled in the art at the time of the invention

that the system and method for assigning orders to a schedule as taught by the

combination of WebVan and Scully et al., with its utilization of commercially available

software to optimize the scheduling of deliveries would have benefited from utilizing any

of a plurality of well known schedule optimization techniques such as defragmenting

time blocks in view of the teachings of Nanry et al.; the resultant system/method

developing an initial feasible delivery schedule solution wherein all orders are delivered

(Nanry et al.: Section 3.1, Pages 111-112).

Regarding Claim 12 WebVan teaches a system and method for assigning orders

to a schedule further comprising committing (saving, recording, storing, etc.) the shift,

which has been modified to fit the order, to a database (data warehouse; reference

WV2: Figure 1, Elements 180; reference WV3: route planner, Pages 38-40).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

- Griffin et al., U.S. Patent No. 5,303,145, teach a system and method for

appointment scheduling (electronic calendaring) comprising generating a list of

schedulable time blocks and rescheduling (moving, shifting, bumping)

overlapping/conflicting time blocks/windows (i.e. rescheduling a lower priority

meeting/appointment).

- Babayev et al., U.S. Patent No. 5,615,121, teach a system and method for assigning an order to a schedule/shift comprising: receiving a customer time window/appointment request, generating a list of schedulable time blocks/windows that overlap the customer time window/opening and shifting/modifying existing appointments (service time intervals) in order to insert new/additional overlapping and/or contiguous orders.

- Fitzpatrick et al., U.S. Patent No. 5,774,867, teach a system and method for electronic calendaring (scheduling) wherein the system/method generates a list of schedulable time blocks including free and virtual time blocks.

- Levinson, Richard, U.S. Patent No. 6,047,260, teach a system and method for assigning an appointment to a schedule comprising generating a list of schedulable time blocks including free time and virtual time blocks, assigning priorities to appointments/activities and shifting/modifying previously scheduled appointments/activities (virtual time blocks) based on the priorities and dynamic schedule changes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (571) 272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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SJ
11/9/2006

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